

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FI             | LING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------|----------------|-----------------|----------------------|-------------------------|------------------|
| 09/807,608      | 608 12/26/2001 |                 | Jack David Hammond   | Q63675                  | 2071             |
| 23373           | 7590           | 07/17/2006      |                      | EXAMINER                |                  |
| SUGHRUE         |                |                 | JABR, FADEY S        |                         |                  |
| SUITE 800       | SYLVAN         | IA AVENUE, N.W. | ART UNIT             | PAPER NUMBER            |                  |
| WASHINGT        | ON, DC         | 20037           | 3639                 |                         |                  |
|                 |                |                 |                      | DATE MAILED: 07/17/2006 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Application No.                            | Applicant(s)                     |  |  |  |  |
|---|--|--|----------------------------------|--|--|--|--|
| Office Action Summary   |  | 09/807,608                                 | HAMMOND ET AL.                   |  |  |  |  |
|   |  | Examiner                                   | Art Unit                         |  |  |  |  |
|   |  | Fadey S. Jabr                              | 3639                             |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |  |                                  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |  |                                  |  |  |  |  |
| Status  |  |  |                                  |  |  |  |  |
| 1)⊠   | Responsive to communication(s) filed on 18 Ma  | ay 2006.                                   |                                  |  |  |  |  |
| 2a)⊠  | This action is <b>FINAL</b> . 2b) This action is non-final.  |  |                                  |  |  |  |  |
| 3)[   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is          |  |                                  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |                                  |  |  |  |  |
| Disposition of Claims   |  |  |                                  |  |  |  |  |
| 4)🖂   | 4)⊠ Claim(s) <u>1-35</u> is/are pending in the application.  |  |                                  |  |  |  |  |
|   | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |                                  |  |  |  |  |
| 5)  | 5) Claim(s) is/are allowed.  |  |                                  |  |  |  |  |
| 6)⊠   | Claim(s) <u>1-35</u> is/are rejected.  |  |                                  |  |  |  |  |
|   | Claim(s) is/are objected to.   |  |                                  |  |  |  |  |
| 8)□   | Claim(s) are subject to restriction and/or   | r election requirement.                    |                                  |  |  |  |  |
| Applicati   | on Papers  |  |                                  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |  |                                  |  |  |  |  |
| 10)   | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.                                 |  |                                  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |                                  |  |  |  |  |
|   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |  |                                  |  |  |  |  |
| 11) 🗌   | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.             |  |                                  |  |  |  |  |
| Priority u  | nder 35 U.S.C. § 119   |  |                                  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |  |                                  |  |  |  |  |
| a) All b) Some * c) None of:  |  |  |                                  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |  |                                  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |                                  |  |  |  |  |
|   | 3. Copies of the certified copies of the priority documents have been received in this National Stage                    |  |                                  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |  |                                  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |  |                                  |  |  |  |  |
| Attachmen   | t(s)   |  |                                  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |  |                                  |  |  |  |  |
|   | e of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail D 5) Notice of Informal F | ate Patent Application (PTO-152) |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 3/11/03 , 12/26/0/ 5) Notice of Informal Patent Application (PTO-152)  6) Other:  |  |  |                                  |  |  |  |  |

#### **DETAILED ACTION**

#### Status of Claims

Claims 1-28 and 32-35 have been amended. Claims 1-35 remain pending and are again presented for examination.

#### Response to Arguments

- 1. Applicant's arguments filed 18 May 2006 with respect to the combination of references have been fully considered but they are not persuasive. In response to applicant's argument concerning improper motivation to combine references, the examiner asserts that "the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, Terry, and Davies, 208 USPQ 871, 881 (CCPA 1981). In the instant case, all the references are concerned with the similar problem of collecting funds for vehicle parking.
- 2. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.
- 3. The Official Notice taken in the previous Office action is being acknowledged as admitted prior art.

Art Unit: 3639

### Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 28 and 32-33 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

As per Claims 1 and 28, the recitation "wherein the variable fee structure includes fee

units and time units..." is vague and indefinite. It is unclear to the Office to what extent the fee

structure represents structural elements. The newly added claim limitation fails to disclose any

structure which would further limit the system claim. The limitation lacks a processor

configured to recite the limitations. Appropriate correction is required in the indicated claims

and any subsequent claims.

As per Claims 1, 28 and 32-33, the recitation "applicable to successive first and second

parking period" is vague and indefinite. The recitation fails to positively recite the claim

limitation.

Further, the recitation "selectively and individually varied...second parking period is

proportionally greater than a fee applied to the first parking period..." is vague and indefinite. It

is unclear to the Office how the fee and time units are "selectively and individually varied" while

also being proportional. If the units are proportional it is unclear how the units would therefore

be "selectively and individually varied". Appropriate correction is required in the indicated

claims and any subsequent claims.

Art Unit: 3639

### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6-8, 10, 12-13, 15-16 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Amirpanahi, U.S. Patent No. 5,648,906.

#### As per Claims 1 and 28, Amirpanahi discloses:

- sensing means for sensing the presence of a vehicle in a parking position (Abstract, lines 22-24, motion detector);
- a housing module included in the parking meter having:
  - communication means for communicating with a network, (C. 5, lines 22-24, shows mother board determines the parking rate for each parking space, with
     C. 13, lines 4-6, shows that mother board has communication through a network, where mother board is connected to the meter);
  - transaction means in communication with the communication means and accessible to a user of the system, adapted to process data to effect a payment,
     (C. 11, lines 43-60, computerized parking meter calculates the amount of time remaining on the prepaid parking card, with C. 12, lines 12, 49-50, shows that the user pays for exactly the parking time used by the user, therefore, the

Art Unit: 3639

amount of time calculated effects the amount the user pays, where the actual meters are accessible by the user); and

- processing means, in communication with the transaction means for
  monitoring the sending means and for determining the payment for an overall
  time period during which the presence of the vehicle is sensed, (C. 12, lines
  56-59, central database computer uses amount of time along with parking rate
  to make payment calculations);
- wherein the payment is determined according to a variable fee structure applicable to the overall time period and is effected at the end of the overall time period, (C. 15, lines 6-19, shows that the point is moved to a correct position on the timer when the user pays for parking, also shows rate changes where fees applied to charge cards are a lower parking rate than rates applied to coin payments).

MPEP 2106 (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or
- (D) "whereby" clauses."

Claims Directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 528-531 (CCPA 1959).

Page 6

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (bd Pat. App. & Inter. 1987).

Thus the structural limitations of Claims 1 and 28 are disclosed in Amirpanahi as described herein. Also as described the limitations of the claim do not distinguish the claimed apparatus from the prior art.

### As per Claim 6, Amirpahani discloses:

wherein the overall time period is the period of time between an initial receipt of payment information and receipt by the processing means of a user-actuated parking termination signal, (C. 11, lines 16-37, shows parking time purchased by user, then the pointer of the timer is move to indicate the amount of parking time desired upon entry of a personal ID and insertion of parking card, with C. 12, lines 23-33, shows pointer returns to zero upon termination).

## As per Claim 7, Amirpahani discloses:

- wherein the user-actuated parking termination signal is actuated by the user, either by providing a termination instruction to the processing means through the transaction means, or by moving the vehicle out of the parking position and thereby causing the

sensing means to cease to detect the presence of the vehicle in the parking position, (C.21, lines 5-12, turning on the parking violation light upon removal of the parked vehicle and termination is indicated to the mother board by the removal of the vehicle).

Page 7

#### As per Claim 8, Amirpahani discloses:

wherein if the presence of the vehicle is sensed after a grace period before or after the overall time period, the processing means is adapted to communicate an infringement signal to an enforcement body over the network, (C. 20, line 62-C. 21, line 3, turning the parking violation light on and notifying the central database and the police if the car remains parked longer than a few minutes).

#### As per Claim 10, Amirpahani discloses:

wherein the sensing means is adapted to sense the presence of one or more vehicles in respective one or more parking positions, (C. 6, lines 39-46, shows a number of networked computerized parking meters where motion detectors exist in each meter).

## As per Claim 12, Amirpahani discloses:

- wherein the housing further includes display means for displaying information to the user, in communication with the processing means, (C. 3, lines 47-51, liquid crystal display).

As per Claim 13 and 16, Amirpahani discloses:

wherein the transaction means includes card reading means for reading credit card information and manual input/wherein the transaction means includes card reading means for reading stored value card information and manual input means for receiving a payment authorization code from the user, (C. 3, lines 51-53, magnetic strip reader connected to a card insertion opening and numeric code pad).

Page 8

As per Claim 15, Amirpahani discloses:

wherein the transaction means includes cash payment means for receiving cash payment, (C. 3, lines 54-56, accepting nickels, dimes, quarters, etc.)

As per Claim 27, Amirpahani discloses:

- wherein the housing further includes printing means for printing a receipt for payment, C. 2, lines 35-39, shows an example for printing receipts).

As per Claim 29, Amirpahani discloses:

- including a plurality of parking meters, (C. 6, lines 40-41, a number of networked computerized parking meters).

Art Unit: 3639

### Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 2-5, 9, 14, 17-18, 30-31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpahani, U.S. Patent No. 5,648,906 in view of Anthonyson, U.S. Patent No. 5,737,710.

As per Claim 2, Amirpahani fails to disclose where the fee units includes a base charging rate and a variable charging rate, the base charging rate being applicable to the first parking period and, if the vehicle is sensed longer than the first parking period, the variable charging rate being applicable to the second parking period after the first parking period, but does disclose rate changes in C. 15, lines 15-19.

However, Anthonyson teaches wherein the variable fee structure includes a base charging rate and a variable charging rate, the base charging rate being applicable for a first time period and, if the vehicle is sensed longer than the first time period, the variable charging rate being applicable for a second time period after the first time period, (C. 7, lines 51-59, certain rate applies under conditions, with C. 8, lines 1-6, shows that if the condition is not satisfied, other rates are applied). Anthonyson teaches this limitation in an analogous art for the purpose of showing that during a time when a condition is satisfied, applying one rate, and then applying another rate at another time when the condition is not satisfied. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani and charge a base rate for a first time period, and if the vehicle is sensed longer than the first time period, to apply the variable charging rate for the second time period with the motivation of applying new charges for a parked vehicle that exceeds its parking time.

As per <u>Claim 3</u>, Amirpahani fails to disclose wherein the overall time period is equal to the sum of the first and second parking periods, but does disclose rate changes in C. 15, lines 15-19).

However, Anthonyson teaches wherein the overall time period is equal to the sum of the first and second time periods, (C. 8, lines 25-29, shows the total rate for a series of time periods is applied by implementing both the first and second rates for both first repeat ad second repeat number of periods). Anthonyson teaches this limitation in an analogous art for the purpose of showing an overall time period through the calculation of the total rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani for the overall time period to be equal to the sum of the first and the second time periods with the motivation of showing that the total period is a combination of more than one time period.

As per <u>Claim 4</u>, Amirpahani fails to disclose wherein the base charging rate is constant over the first parking period and the variable charging rate changes over the second parking period, but does disclose rate changes in C. 15, lines 15-19.

Art Unit: 3639

However, Anthonyson teaches wherein the base charging rate is constant over the first time period and the variable charging rate changes over the second time period, (C.8, lines 17-24, shows that rates are established and can be set, in this case, repeat can be set to the number of periods over which to use the rate, then when the second period comes, if the repeat is not set, another rate is applied). Anthonyson discloses this limitation in an analogous art for the purpose of showing that more than one rate table may be used in the calculation of the cost of a single garage entrance and exit. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani for the base charging rate being constant over the first time period and the variable charging rate changes over the second time period with the motivation of showing that the rates change according to parking periods.

As per <u>Claims 5 and 35</u>, Amirpahani fails to disclose wherein the variable charging rate increase over the second parking period or wherein the variable charging rate decreases over the second parking period, but does disclose rate changes in C. 15, lines 15-19.

However, Anthonyson discloses wherein the variable charging rate increases over the second parking period/wherein the variable charging rate decreases over the second parking period (C. 7, lines 63-64, shows a calendar of holidays may be specified as a condition, with C. 8, lines 3-6, shows a first rate, and a second rate, where rates are set according to conditions, therefore if the first parking period is a holiday, and the second parking period is not a holiday, the rate will increase as one goes from the first parking period to the second, since there is little to no charge set on holidays, and there, if the second parking period is a holiday, the rate would

Art Unit: 3639

therefore decrease over the second time period. Anthonyson teaches this limitation in an analogous art for the purpose of showing that more than one rate table may be used in the calculation of the cost of a single garage entrance and exit. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani for the variable charging rate increases over the second parking period, or wherein the variable charging rate increases over the second parking period, with the motivation of showing that the rates change according to parking periods.

As per <u>Claim 9</u>, Amirpahani fails to disclose wherein a nil charge rate is applicable during the grace period, but does disclose rate changes in C. 15, lines 15-19.

However, Anthonyson teaches wherein a nil charge rate is applicable during the grace period, (C. 8, lines 15-18, shows that if the remaining duration is less than the grace period, then the rate calculation is finished. Anthonyson teaches this limitation in an analogous art for the purpose of showing that the limit of conditions will not be searched from the beginning, and therefore new rates will not be applied before a grace period ends. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to include a nil charge rate to be applicable during the grace period with the motivation of showing no new rates are applied until a grace period ends.

As per <u>Claim 14</u>, Amirpahani fails to disclose wherein if the user inputs a special vehicle authorization code into the transaction means, a nil charging rate is applicable for at least a part of the overall time period, but does disclose rate changes in C. 15, lines 15-19.

Art Unit: 3639

However, Anthonyson discloses wherein if the user inputs a special vehicle authorization code into the transaction means, a nil charging rate is applicable for at least a part of the overall time period, (C. 8, lines 6-9, discounts applied for selected classes of accounts). Anthonyson teaches this limitation in an analogous art for the purpose of showing that rates change according to different classes of vehicles. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to charge a nil rate upon entering a special vehicle authorization with the motivation of charging a special rate for a specific type of vehicle.

As per Claims 17 and 30, Amirpahani fails to disclose wherein the communication means is adapted to communicate with a financial institution for determining whether the authorization code is valid and whether there is sufficient credit available to the user to collect the payment/wherein the communication means of each parking meter is in communication with a central control station, the central control stations being adapted to receive operational information and financial transaction information from the processing means of each parking meter over the network, but does disclose collecting payment through credit card payments in C. 3, lines 51-53.

However, Anthonyson discloses wherein the communication means is adapted to communicate with a financial institution for determining whether the authorization code is valid and whether there is sufficient credit available to the user to collect the payment/ wherein the communication means of each parking meter is in communication with a central control station, the central control station being adapted to receive operational information and financial

Page 14

Application/Control Number: 09/807,608

Art Unit: 3639

transaction information from the processing means of each parking meter over the network, (C. 1, lines 25-28, debit users bank account, with C. 2, lines 57-63, download stored financial information, C. 3, lines 22-35, host computer). Anthonyson teaches this limitation in an analogous art for the purpose of using this information to create a billing statement. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to communicate with a financial institution for determining whether the authorization code is valid and whether there is sufficient credit available to the user to collect the payment and wherein the communication means of each parking meter is in communication with a central control stations, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter over the network with the motivation of providing information that would allow a financial institution to provide adequate financial services.

As per Claim 18, Amirpahani discloses wherein the communication means is in communication with a central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means over the network, (C. 5, lines 22-24, shows mother board determines the parking rate for each parking space, with C. 13, lines 4-6, shows that mother board has communication through a network, where mother board is connected to the meter.

As per Claim 31, Amirpahani fails to disclose wherein each parking meter is in communication with one or more local controllers, each of which is in communication with a

Art Unit: 3639

meters in C. 6, lines 39-41.

central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter via the one or more local controllers, but does disclose a plurality of computerized parking

Page 15

However, Anthonyson teaches each parking meter is in communication with one or more local controllers, each of which is in communication with a central station, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter via the one or more local controllers, (C. 3,lines 22-24, cost information, instructions to open the gate are sent to the lane controller). Anthonyson discloses this limitation in an analogous art for the purpose of showing that information is sent to lane controllers for the purpose of opening access to the lanes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani and include for each parking meter to be in communication with one or more local controllers, each of which is in communication with a central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter via the one or more local controllers with the motivation of allowing access to the lane upon verification with a financial institution.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpahani, U.S. Patent No. 5,648,06 in view of Kielland, U.S. Patent No. 6,081,206.

Art Unit: 3639

As per <u>Claim 11</u>, Amirpahani fails to disclose wherein the sensing means includes at least one induction coil for each parking position, but does disclose a motion detector for sensing parked vehicles in C. 13, lines 7-11.

However, Kielland teaches wherein the sensing means includes at least one induction coil for each parking position, (C. 10, lines 7-12, induction coil). Kielland discloses this limitation in an analogous art for the purpose of achieving adequate sensitivity. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani an include an induction coil with the sensing means with the motivation of incorporating sensing means that will improve the sensing of vehicles.

11. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpahani, U.S. Patent No. 5,648,906.

As per <u>Claims 19-21</u>, Amirpahani does not explicitly disclose processing means that includes memory means, and wherein the system further includes transportable programming device adapted to interface with the processing means for reconfiguring thereof and for reading and writing data from and to the memory means/wherein the memory means includes further memory means for storing system configuration data, but does disclose a central database computer which acts as a server in C. 13, lines 34-35.

Official notice is taken that it is old and well known in the computing art to have processing means that includes memory means, and wherein the system further includes a transportable programming device adapted to interface with the processing means for

Art Unit: 3639

reconfiguring thereof and for reading and writing data from and go the memory means and wherein the memory means includes further memory means for storing system configuration data. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to have processing means that includes memory means, and wherein the system further includes a transportable programming device adapted to interface with the processing means for reconfiguring thereof and for reading and writing data from and to the memory means, and wherein the memory means includes further memory means for storing system configuration data with the motivation of providing hardware, software, and functionality that is consistently common with central database computers that act as servers.

As per Claim 22, Amirpanahi discloses:

- wherein the programming device is also adapted to interface with a data processing means of the central, (C. 5, lines 22-24, shows mother board determines the parking rate for each parking space, with C. 13, lines 4-6, shows that mother board has communication through a network, where mother board is connected to the meter).
- 12. Claims **23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpahani, U.S. Patent No. 5,648,906 in view of Williams, U.S. Patent No. 6,081,205.

As per Claims 23-26, Amirpahani does not explicitly disclose the following:

Art Unit: 3639

Page 18

wherein the transaction means includes means for sensing when an access door to internal components of the housing has been opened/wherein the system further includes diagnostic means for performing diagnostic inspection thereof/ wherein the diagnostic means of each parking meter includes fault-related data/wherein the diagnostic means is controlled by the processing means and is adapted to transmit the fault-related data to the control station through communications network, but does disclose a sensor for detecting the parked cars in C. 6, lines 41-46.

However, Williams teaches wherein the transaction means includes means for sensing when an access door to internal components of the housing has been opened/wherein the system further includes diagnostic means for performing diagnostic inspection thereof/wherein the diagnostic means of each parking meter includes fault-condition monitoring and counting means, for fault monitoring and storing fault-related data/wherein the diagnostic means is controlled by the processing means and is adapted to transmit the fault-related data to the control station through communications network, (C. 2, lines 27-36, shows a ground fault interrupt switch interconnected between the power source and the remainder of the system to cut off power to the parking meter system in the even of an accident or damage to the meter system, in this case opening the access door to internal components is in the same category as damage to the meter since this is an unusual condition that happens to the meter, in addition, accident or damage represents fault data, and in this case this data must be stored in order for the system to recognize fault, take proper action, and accident or damage information is sent through a communication network to transmit information from the meter to the control station, and in order to detect damage, diagnostic means must be present). Williams teaches this limitation in an analogous art

for the purpose of showing that the meter is equipped with means for detecting and handling of accidents or damage to the meter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to incorporate all of the above limitations with the motivation of supplying a meter that would be able to diagnose its problems.

13. Claims 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpanahi, U.S. Patent No. 5,648,906 in view of Williams, U.S. Patent No. 6,081,205 and Anthonyson, U.S. Patent No. 5,737,710.

## As per Claim 34, Amirpahani discloses:

- providing one or more parking meters according to claim 22 to monitor utilization of the parking positions, (C. 6, lines 39-46, using a motion detector on a number of networked computerized parking meters);
- providing a connection to each parking meter through a communications network, to control station having processing means, (C. 16, lines 57-63, parking meters connected to the central database computer and the central database computer having control over thousands of meters);
- causing each parking meter to store operational data relating to payment transactions performed by that parking meter, (C. 11, lines 28-32, scanning information from parking charge card to the mother board on the meter);

Art Unit: 3639

Amirpahani fails to disclose the following, but does disclose a sensor for detecting the parked cars in C. 6, lines 41-46.

However, Williams teaches causing each parking meter to regularly perform selfdiagnostic tests and to store data relating to those tests/ causing the parking meters to transmit the data relating to the self diagnostic tests or the operational data to the control station in real time, (C. 2, lines 27-36, shows a ground fault interrupt switch interconnected between the power source and the remainder of the system to cut off power to the parking meter system in the event of an accident or damage to the meter system, in this case opening the access door to internal components is in the same category as damage to the meter since this is an unusual condition that happens to the meter, in addition, accident or damage represents fault data, and in this case this data must be stored in order for the system to recognize fault, take proper action, and accident or damage information is sent through a communications network to transmit information from the meter to the control station, and in order to detect damage, diagnostic means must be present). Williams discloses this limitation in an analogous art for the purpose of showing that the meter is equipped with means for detecting and handling of accidents or damage to the meter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani and include incorporating all of the above limitations with the motivation of supplying a meter that would be able to diagnose its problems.

Neither Amirpahani, nor Williams discloses the following, but Amirpahani discloses an LCD display for outputting information related to parking status in C. 18, lines 15-24.

However, Anthonyson teaches at the control station, processing said data in real time for producing one or more reports based on the processed data, (C. 11, lines 32-34, generating

Art Unit: 3639

reports). Anthonyson teaches this limitation in an analogous art for the purpose of showing that information on parking activity by the time of day, length of stay, cost and the like are produced via data report module. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Amirpahani to process data in real time of the producing one or more reports based on the processed data with the motivation of

14. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amirpahani, U.S. Patent No. 6,648,906 in view of Okajima, JP Patent No. 402093781 A.

## As per Claim 32, Amirpahani discloses:

allowing the physical output of parking data.

- monitoring a presence signal, representative of the presence or absence of a vehicle from at least one parking bay associated with the parking meter (C. 13, lines 7-11, motion detector);
- receiving payment information from a user of said parking bay via the parking meter which enables a payment, (C. 13, lines 20-25, user inserting a parking charge card after a certain period of time);
- determining a length of time said vehicle is present in said at least one parking bay in response to the presence signal, (C. 15, lines 6-11, mother board directs timer to move pointer to correct position on timer).
- effecting the payment, (C. 15, lines 18-19, upon use of parking charge card, lowering the rate).

Art Unit: 3639

Amirpahani fails to disclose determining the payment based on a variable fee structure that includes fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected.

However, Okajima teaches an automatic charge adjusting machine installed in a vehicle outgoing port calculates either the free of charge ratio of a parking charge or a small amount of charge exclusively used for the short-time parking when the parking ticket inserted into the machine is the parking ticket exclusively used for the short-time parking. Further, when the vehicle outgoing time of day exceeds the previously determined specified time for the short-time parking, the machine calculates the penalty, the amount of which is larger than the general charge (see Constitution). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Amirpahani and include charging a user a higher rate, a penalty, for parking in the slot for a longer period of time than authorized, because it allows parking efficiency to be heightened.

### As per Claim 33, Amirpahani discloses:

- sensing the presence or absence of a vehicle in a parking position, (C. 13, lines 7-11, motion detector sensing vehicles in parked positions);

Art Unit: 3639

- selecting one or more fee charging rates from a plurality of fee charging rates applicable under one or more circumstances of use of the system, (C. 15, lines 15-19, rate changes setting parking charge at a lower rate for using parking charge card);

- receiving payment information relating to the payment of fees and authorization
   thereof by a user of the system via a parking meter associated with the parking
   position (C. 13, lines 20-25, user inserting a parking charge card after a certain period of time);
- establishing a start time from which fees may be charged by the establishing of said start time being responsive to the sending of the presence of said vehicle in said parking position; establishing a finish time beyond which fees will not be charged, the establishing of said finish time responsive to a timing termination signal actuated by said user, (C. 15, lines 6-11, mother board directs timer to move pointer to correct position on timer, with C. 11, lines 32-37, shows pointer on timer moved to indicate amount of parking time desired by user once the balance on the parking card is verified, and C. 12, lines 23-32, shows that the pointer of the timer is returned to zero upon termination of the parking time);
- calculating fees to be received from said user based on said one or more fee rates applicable under said one or more circumstances of use between said start time and said finish time, (C. 15, lines 18-19, upon use of parking charge card, lowering the rate);

Art Unit: 3639

- using said payment information to effect receipt of a payment from said user based on said calculated fees, C. 15, lines 57-64, indicate correct parking time upon deducting calculated fees from parking charge card).

Amirpahani fails to disclose wherein the plurality of fee rates include fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected.

However, Okajima teaches an automatic charge adjusting machine installed in a vehicle outgoing port calculates either the free of charge ratio of a parking charge or a small amount of charge exclusively used for the short-time parking when the parking ticket inserted into the machine is the parking ticket exclusively used for the short-time parking. Further, when the vehicle outgoing time of day exceeds the previously determined specified time for the short-time parking, the machine calculates the penalty, the amount of which is larger than the general charge (see Constitution). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Amirpahani and include charging a user a higher rate, a penalty, for parking in the slot for a longer period of time than authorized, because it allows parking efficiency to be heightened.

#### Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadey S. Jabr whose telephone number is (571) 272-1516. The examiner can normally be reached on Mon. - Fri. 7:30am to 4:00pm.

Art Unit: 3639

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. John Hayes can be reached on (571) 272-6708. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fadey S Jabr Examiner

Art Unit 3639

**FSJ** 

Please address mail to be delivered by the United States Postal Service (USPS) as

follows:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-1516 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the Customer Service/Window, Randolph Building, 401

Dulany Street, Alexandria, VA 22314

SUPERVISORY PATENT EXAMINER